



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/713,578  
Source: 1 fwo  
Date Processed by STIC: 1/3/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/713,578

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length     The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII     The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length     Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
 This sequence is intentionally skipped  
  
 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
 <210> sequence id number  
 <400> sequence id number  
 000
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11      Use of <220>     Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n/Xaa     "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

FYI →



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/713,578

DATE: 01/03/2005

TIME: 15:44:38

Input Set : A:\124263-1006 SEQUENCE LISTING.ST25.txt

Output Set: N:\CRF4\01032005\J713578.raw

3 <110> APPLICANT: Awasthi, Sanjay  
 4 Singhal, Sharad S.  
 6 <120> TITLE OF INVENTION: Liposomes For Protection Against Toxic Compounds  
 8 <130> FILE REFERENCE: 124263-1006  
 10 <140> CURRENT APPLICATION NUMBER: US 10/713,578  
 11 <141> CURRENT FILING DATE: 2003-11-13  
 13 <150> PRIOR APPLICATION NUMBER: 60/425,814  
 14 <151> PRIOR FILING DATE: 2002-11-13  
 16 <160> NUMBER OF SEQ ID NOS: 2  
 18 <170> SOFTWARE: PatentIn version 3.3  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 655  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: recombinant  
 25 <400> SEQUENCE: 1

|    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 27 | Met | Thr | Glu | Cys | Phe | Leu | Pro | Pro | Thr | Ser | Ser | Pro | Ser | Glu | His | Arg |
| 28 | 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |     |
| 31 | Arg | Val | Glu | His | Gly | Ser | Gly | Leu | Thr | Arg | Thr | Pro | Ser | Ser | Glu | Glu |
| 32 |     |     |     | 20  |     |     |     | 25  |     |     |     | 30  |     |     |     |     |
| 35 | Ile | Ser | Pro | Thr | Lys | Phe | Pro | Gly | Leu | Tyr | Arg | Thr | Gly | Glu | Pro | Ser |
| 36 |     |     | 35  |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |
| 39 | Pro | Pro | His | Asp | Ile | Leu | His | Glu | Pro | Pro | Asp | Tyr | Val | Ser | Asp | Asp |
| 40 |     | 50  |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |     |
| 43 | Glu | Lys | Asp | His | Gly | Lys | Lys | Lys | Gly | Lys | Phe | Lys | Lys | Lys | Glu | Lys |
| 44 | 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |     |
| 47 | Arg | Thr | Glu | Gly | Tyr | Ala | Ala | Phe | Gln | Glu | Asp | Ser | Ser | Gly | Asp | Glu |
| 48 |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |     |
| 51 | Ala | Glu | Ser | Pro | Ser | Lys | Met | Lys | Arg | Ser | Lys | Gly | Ile | His | Val | Phe |
| 52 |     |     |     | 100 |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| 55 | Lys | Lys | Pro | Ser | Phe | Ser | Lys | Lys | Lys | Glu | Lys | Asp | Phe | Lys | Ile | Lys |
| 56 |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| 59 | Glu | Lys | Pro | Lys | Glu | Glu | Lys | His | Lys | Glu | Glu | Lys | His | Lys | Glu | Glu |
| 60 |     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| 63 | Lys | His | Lys | Glu | Lys | Lys | Ser | Lys | Asp | Leu | Thr | Ala | Ala | Asp | Val | Val |
| 64 | 145 |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |     |
| 67 | Lys | Gln | Trp | Lys | Glu | Lys | Lys | Lys | Lys | Lys | Pro | Ile | Gln | Glu | Pro |     |
| 68 |     |     |     | 165 |     |     |     | 170 |     |     |     |     | 175 |     |     |     |
| 71 | Glu | Val | Pro | Gln | Ile | Asp | Val | Pro | Asn | Leu | Lys | Pro | Ile | Phe | Gly | Ile |
| 72 |     |     |     | 180 |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| 75 | Pro | Leu | Ala | Asp | Ala | Val | Glu | Arg | Thr | Met | Met | Tyr | Asp | Gly | Ile | Arg |
| 76 |     |     | 195 |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| 79 | Leu | Pro | Ala | Val | Phe | Arg | Glu | Cys | Ile | Asp | Tyr | Val | Glu | Lys | Tyr | Gly |
| 80 |     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |

Does Not Comply  
 Corrected Diskette Needed

*invalid* what is source of genetic material?

(see items  
 10 and 11  
 on Enor  
 Summary  
 Sheet)

## RAW SEQUENCE LISTING

DATE: 01/03/2005

PATENT APPLICATION: US/10/713,578

TIME: 15:44:38

Input Set : A:\124263-1006 SEQUENCE LISTING.ST25.txt

Output Set : N:\CRF4\01032005\J713578.raw

```

83 Met Lys Cys Glu Gly Ile Tyr Arg Val Ser Gly Ile Lys Ser Lys Val
84 225                230                235                240
87 Asp Glu Leu Lys Ala Ala Tyr Asp Arg Glu Glu Ser Thr Asn Leu Lys
88                245                250                255
91 Asp Tyr Glu Pro Asn Thr Val Ala Ser Leu Leu Lys Gln Tyr Leu Arg
92                260                265                270
95 Asp Leu Pro Glu Asn Leu Leu Thr Lys Glu Leu Met Pro Arg Phe Glu
96                275                280                285
99 Glu Ala Cys Gly Arg Thr Thr Glu Thr Glu Lys Val Gln Glu Phe Gln
100                290                295                300
103 Arg Leu Leu Lys Arg Leu Pro Glu Cys Asn Tyr Leu Leu Ile Ser Trp
104 305                310                315                320
107 Leu Ile Val His Met Asp His Val Ile Ala Lys Glu Leu Glu Thr Lys
108                325                330                335
111 Met Asn Ile Gln Asn Ile Ser Ile Val Leu Ser Pro Thr Val Gln Ile
112                340                345                350
115 Ser Asn Arg Val Leu Tyr Val Phe Phe Thr His Val Gln Glu Leu Phe
116                355                360                365
119 Gly Asn Val Val Leu Lys Gln Val Met Lys Pro Leu Arg Trp Ser Asn
120                370                375                380
123 Met Ala Thr Met Pro Thr Leu Pro Glu Thr Gln Ala Gly Ile Lys Glu
124 385                390                395                400
127 Glu Ile Arg Arg Gln Glu Phe Leu Leu Asn Cys Leu His Arg Asp Leu
128                405                410                415
131 Gln Gly Gly Ile Lys Asp Leu Ser Lys Glu Lys Arg Leu Trp Glu Val
132                420                425                430
135 Gln Arg Ile Leu Thr Ala Leu Lys Arg Lys Leu Arg Glu Ala Lys Arg
136                435                440                445
139 Gln Glu Cys Glu Thr Lys Ile Ala Gln Glu Ile Ala Ser Leu Ser Lys
140                450                455                460
143 Glu Asp Val Ser Lys Glu Glu Met Asn Glu Asn Lys Glu Val Ile Asn
144 465                470                475                480
147 Ile Leu Leu Ala Gln Glu Asn Glu Ile Leu Thr Glu Gln Glu Glu Leu
148                485                490                495
151 Leu Ala Asn Glu Gln Phe Leu Arg Arg Gln Ile Ala Ser Glu Lys Glu
152                500                505                510
155 Glu Ile Glu Arg Leu Arg Ala Glu Ile Ala Glu Ile Gln Ser Arg Gln
156                515                520                525
159 Gln His Gly Arg Ser Glu Thr Glu Glu Tyr Ser Ser Glu Ser Glu Ser
160                530                535                540
163 Glu Ser Glu Asp Glu Glu Glu Leu Gln Ile Ile Leu Glu Asp Leu Gln
164 545                550                555                560
167 Arg Gln Asn Glu Glu Leu Glu Ile Lys Asn Asn His Leu Asn Gln Ala
168                565                570                575
171 Ile His Glu Glu Arg Glu Ala Ile Ile Glu Leu Arg Val Gln Leu Arg
172                580                585                590
175 Leu Leu Gln Met Gln Arg Ala Lys Ala Glu Gln Gln Ala Gln Glu Asp
176                595                600                605
179 Glu Glu Pro Glu Trp Arg Gly Gly Ala Val Gln Pro Pro Arg Asp Gly

```

## RAW SEQUENCE LISTING

DATE: 01/03/2005

PATENT APPLICATION: US/10/713,578

TIME: 15:44:38

Input Set : A:\124263-1006 SEQUENCE LISTING.ST25.txt

Output Set: N:\CRF4\01032005\J713578.raw

```

180      610      615      620
183 Val Leu Glu Pro Lys Ala Ala Lys Glu Gln Pro Lys Ala Gly Lys Glu
184 625      630      635      640
187 Pro Ala Lys Pro Ser Pro Ser Arg Asp Arg Lys Glu Thr Ser Ile
188      645      650      655
191 <210> SEQ ID NO: 2
192 <211> LENGTH: 1974
193 <212> TYPE: DNA
194 <213> ORGANISM: human bone marrow
196 <400> SEQUENCE: 2
197 atgactgagt gcttcctgcc cccaccagc agccccagtg aacaccgcag ggtggagcat      60
199 ggcagcgggc ttaccgggac cccagctct gaagagatca gccctactaa gtttcctgga      120
201 ttgtaccgca ctggcgagcc ctcacctccc catgacatcc tcatgagcct cctgatgtag      180
203 tgtctgatga tgagaaagat catgggaaga aaaaagggaa atttaagaaa aaggaaaaga      240
205 ggactgaagg ctatgcagcc tttcaggaag atagctctgg agatgaggca gaaagtcctt      300
207 ctaaaatgaa gaggtccaag ggaatccatg ttttcaagaa gaagcccagc ttttctaaaa      360
209 agaaggaaaa ggatttttaa ataaaagaga aacccaaaga agaaaagcat aaagaagaaa      420
211 gcacaaagaa gaaaaacata aagagaagaa gtcaaaagac ttgacagcag ctgatgttgt      480
213 taaacagtgg aaggaaaaga agaaaaagaa aaagccaatt caggagccag aggtgcctca      540
215 gattgatgtt ccaaattctca aaccattttt tggaattcct ttggctgatg cagtagagag      600
217 gaccatgatg tatgatggca ttcggtctgcc agccgttttc cgtgaatgta tagattacgt      660
219 agagaagtat ggcataagat gtgaaggcat ctacagagta tcaggaatta aatcaaagggt      720
221 ggatgagcta aaagcagcct atgaccggga ggagtctaca aacttggaag actatgagcc      780
223 taacactgta gccagtttgc tgaagcagta ttgctgagac cttccagaga atttgcttac      840
225 caaagagctt atgccagat ttgaagaggc ttgtgggagg accacggaga ctgagaaagt      900
227 gcaggaattc cagcgtttac tcaaagaact gccagaatgt aactatcttc tgatttcttg      960
229 gtcatttgtg cacatggacc atgtcattgc aaaggaactg gaaacaaaaa tgaatatata      1020
231 gaacatttct atagtgtctc gcccaactgt gcagatcagc aatcgagtcc tgtatgtgtt      1080
233 tttcacacat gtgcaagaac tctttggaaa tgtggtacta aagcaagtga tgaaacctct      1140
235 gcgatggtct aacatggcca cgatgcccac gctgccagag acccaggcgg gcatcaagga      1200
237 ggagatcagg agacaggagt ttcttttgaa ttgtttacat cgagatctgc aggggtggat      1260
239 aaaggatttg tctaaagaag aaagattatg ggaagtacaa agaattttga cagccctcaa      1320
241 aagaaaactg agagaagcta aaagacagga gtgtgaaacc aagattgcac aagagatagc      1380
243 cagtctttca aaagaggatg tttccaaaga agagatgaat gaaaatgaag aagttataaa      1440
245 tatttcctct gctcaggaga atgagatcct gactgaacag gaggagctcc tggccatgga      1500
247 gcagtttctg cgccggcaga ttgcctcaga aaaagaagag attgaacgcc tcagagctga      1560
249 gattgctgaa attcagagtc gccagcagca cggccgaagt gagactgagg agtactcctc      1620
251 cgagagcgag agcgagagtg aggatgagga ggagctgcag atcattctgg aagacttaca      1680
253 gagacagaac gaagagctgg aaataaagaa caatcatttg aatcaagcaa ttcagagga      1740
255 gcgcgaggcc atcatcgagc tgcgcgtgca gctgcggctg ctccagatgc agcgagccaa      1800
257 ggccgagcag caggcgagag aggacgagga gcctgagtgg cgcgggggtg ccgtccagcc      1860
259 gcccgagagc ggcgtccttg agccaaaagc agctaaagag cagccaaagg caggcaagga      1920
261 gccggc aaaag ccatacgcca gcagggatag gaaggagacg tccatctgad aasv      1974

```

**VERIFICATION SUMMARY**

DATE: 01/03/2005

PATENT APPLICATION: US/10/713,578

TIME: 15:44:39

Input Set : A:\124263-1006 SEQUENCE LISTING.ST25.txt

Output Set: N:\CRF4\01032005\J713578.raw